# West Virginia Department of Environmental Protection Division of Air Quality

# **Fact Sheet**



# For General Permit Registration Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-NGGP-2007-09900013
Application Received: January 25, 2002
Plant Identification Number: 09900013
Permittee: Columbia Gas Transmission
Facility Name: Ceredo Compressor Station
Mailing Address: 1700 MacCorkle Avenue, SE

Charleston, WV 25314 Issued: October 19, 2007

Physical Location: Walker's Branch Road, Wayne County, West Virginia
UTM Coordinates: 366.1 km Easting • 4247.5 km Northing • Zone 17
Directions: Traveling I-64 West from Charleston, take the Kenov

Traveling I-64 West from Charleston, take the Kenova-Ceredo exit. Turn left onto Route 52. Make a left onto Airport Road. Turn right onto Walker's Branch Road at the Pilgrim Glass Plant, travel 2 miles, the station is on the left.

#### **Facility Description**

The Ceredo Station is a natural gas transmission facility covered by Standard Industrial Code (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of six (6) 2800-hp and one (1) 2700-hp natural gas fired reciprocating compressor engines, one (1) 10,200-hp and one (1) 12,500-hp compressor turbines, and numerous storage tanks of various sizes. On site support equipment includes one (1) 738 hp emergency generator, one (1) 6.84 MMBtu/hr boiler and one (1) 0.35 MMBtu/hr line heater.

### **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]			
Criteria Pollutants	Potential Emissions	2005 Actual Emissions	
Carbon Monoxide (CO)	331.9	94.2	

Nitrogen Oxides (NO <sub>X</sub> )	4,087.2	1,181.9
Particulate Matter (PM <sub>10</sub> )	29.1	8.2
Total Particulate Matter (TSP)	29.1	8.2
Sulfur Dioxide (SO <sub>2</sub> )	2.7	0.4
Volatile Organic Compounds (VOC)	98.6	28.0

# $PM_{10}$ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2005 Actual Emissions	
Formaldehyde	41.3	11.1	
Other HAPs	8.7	0.00	
Total HAPs	49.9	11.13	
Some of the above HAPs may be counted as PM or VOCs.			

# **Title V Program Applicability Basis**

This facility has the potential to emit 331.9 tons/yr of CO, 4,087.2 tons/yr of NOx, 49.9 tons/yr of Total HAPs inclusive of 41.3 tons/yr of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Columbia Gas Transmission Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

# **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR10	SO <sub>2</sub> Emissions
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permit for construction, modification
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Particulate Fugitive

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

# **Active Permits/Consent Orders**

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-1856	July 17, 1995	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the General Requirement Comparison Table B which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

N/A

# **Non-Applicability Determinations**

This facility is a major source of HAPs. However, according to sections g, h and j below no MACT is applicable to this facility.

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 C.F.R. 60 Subpart GG; Standards *of Performance for Stationary Gas Turbines There* are two turbines at Ceredo station which were installed in 1967 and 1971. No modifications to the turbines have occurred since the original installation. 40 C.F.R. 60 Subpart GG is not applicable because the engines were installed before October 3, 1977.
- b. 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* All tanks at Ceredo station are below 40,000 gallons in capacity.
- c. 40 C.F.R. 60 Subpart Kb; Standards of Performance for Volatile Organic Liquid Storage Vessels All tanks at Ceredo station are below 75m<sup>3</sup> in capacity.
- d. 40 C.F.R. 60 Subpart KKK; Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant Ceredo station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
- e. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:* All storage tanks at Ceredo station are below 40,000 gallons in capacity, hence 45CSR§21-28 is not applicable. Ceredo station is not engaged in the extraction or fractionation of natural gas, hence 45CSR§21-29 is not applicable.
- f. 45CSR27; *To Prevent and Control the Emissions of Toxic Air Pollutants:* Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."

- g. 40 C.F.R. 63 Subpart ZZZZ; *RICE MACT* All the engines are existing 2-cycle or 4-cycle, lean burn or less than 500 HP; Hence Rice MACT is not applicable to this facility.
- h. 40 C.F.R. 63 Subpart YYYY; Turbine *MACT* There are two turbines at Ceredo station which were installed in 1967 and 1971. No modifications to the turbine have occurred since the original installation; hence it is an existing turbine and not subject to this MACT.
- i. 40 C.F.R. 60 Subparts Dc; *Standards of Performance for Steam Generating Units* The boiler and heater at this facility are less than 10 MMBtu/hr; Hence Subpart Dc is not applicable.
- j. 40 C.F.R. 63 Subpart DDDDD; Boiler *MACT* The boiler and heater at this facility use gaseous fuel and are less than 10 MMBtu/hr; Hence Subpart DDDDD is not applicable.

Since the last Title V modification WVDEP has determined that 45CSR10 does not apply to gas fired engines. Also 45CSR10 is not applicable to the facility boiler and heater because they are less than 10 MMBtu/hr.

40 CFR 64 - Engines and turbines do not have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility. Boiler and heater are not a major source; therefore, CAM is not applicable.

According to 45CSR§2-11.1 the boiler and heater are exempt from MRR (Monitoring, recordkeeping and reporting) because they are less than 10 MMBtu/hr.

# **Request for Variances or Alternatives**

None

# **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Title V general Permit has already been advertised and finalized. This fact sheet for facility registration is written for the file. This fact sheet states which rules are applicable to the particular facility and which rules are not applicable.

# **Procedure for Requesting Public Hearing**

N/A

#### **Point of Contact**

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#### **Response to Comments (Statement of Basis)**

N/A